

Algebraic Long Division

1 $(x^3 + 8x^2 + 11x + 21) \div (x + 8)$

2 $(x^3 + 9x^2 + 5 + 20) \div (x - 5)$

3 $(2x^3 + x^2 + 3x + 24) \div (x - 9)$

4 $(5x^3 + 4x^2 - 45x - 36) \div (x^2 - 9)$

5 $(4x^4 - 15x^3 - 28x^2 + 6x + 3)$
 $\div (4x + 1)$

6 $(5x^4 - 45x^3 + 52x^2 - 18x + 20)$
 $\div (5x^2 + 2)$

Algebraic Long Division

Answers

1 $(x^3 + 8x^2 + 11x + 21) \div (x + 8)$

2 $(x^3 + 9x^2 + 5 + 20) \div (x - 5)$

$$\underline{x^2 + 11 + \frac{-67}{x + 8}}$$

$$\underline{x^2 + 14x + 75 + \frac{395}{x - 5}}$$

3 $(2x^3 + x^2 + 3x + 24) \div (x - 9)$

4 $(5x^3 + 4x^2 - 45x - 36) \div (x^2 - 9)$

$$\underline{2x^2 + 19x + 174 + \frac{1590}{x - 9}}$$

$$\underline{5x + 4}$$

5 $(4x^4 - 15x^3 - 28x^2 + 6x + 3) \div (4x + 1)$

6 $(5x^4 - 45x^3 + 52x^2 - 18x + 20) \div (5x^2 + 2)$

$$\underline{x^3 - 4x^2 - 6x + 3}$$

$$\underline{x^2 - 9x + 10}$$